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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/540,180	03/31/2000	Sung-Hwa Gong	678-458 (P8993)	2621
7590 10/20/2005			EXAMINER	
Paul J Farrell			ORGAD, EDAN	
Dilworth & Bar	rrese			
333 Earle Ovin	gton Boulevard	ART UNIT	PAPER NUMBER	
Uniondale, NY 11553			2684	

DATE MAILED: 10/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)	_
	09/540,180	GONG, SUNG-HWA	
Office Action Summary	Examiner	Art Unit	
	Edan Orgad	2684	
The MAILING DATE of this commu Period for Reply	nication appears on the cover shee	et with the correspondence address	
A SHORTENED STATUTORY PERIOD WHICHEVER IS LONGER, FROM THE  - Extensions of time may be available under the provisio after SIX (6) MONTHS from the mailing the provisio 1 ff NO period for reply is specified above, the maximum  - Failure to reply within the set or extended period for reply received by the Office later than three month earned patent term adjustment. See 37 CFR 1.704(b).	MAILING DATE OF THIS COMMI ns of 37 CFR 1.136(a). In no event, however, m nmunication. statutory period will apply and will expire SIX (6) ly will, by statute, cause the application to becor	UNICATION.  lay a reply be timely filed  MONTHS from the mailing date of this communication.  me ABANDONED (35 U.S.C. § 133).	
Status		•	
<ol> <li>Responsive to communication(s) f</li> <li>This action is FINAL.</li> <li>Since this application is in condition closed in accordance with the practice.</li> </ol>	2b)⊠ This action is non-final: n for allowance except for formal i	matters, prosecution as to the merits is C.D. 11, 453 O.G. 213.	
Disposition of Claims			
4) ☐ Claim(s) 40-43 is/are pending in the da) Of the above claim(s) is.  5) ☐ Claim(s) is/are allowed.  6) ☐ Claim(s) 40-43 is/are rejected.  7) ☐ Claim(s) is/are objected to.  8) ☐ Claim(s) are subject to rest	are withdrawn from consideration		
Application Papers			
9) The specification is objected to by the specification is objected to by the specific strain of the specific str	e: a) accepted or b) objected or b) objected ection to the drawing(s) be held in abing the correction is required if the drawn	eyance. See 37 CFR 1.85(a). wing(s) is objected to. See 37 CFR 1.121(d).	
Priority under 35 U.S.C. § 119			
<ol><li>Copies of the certified copie</li></ol>	y documents have been received. y documents have been received s of the priority documents have b ional Bureau (PCT Rule 17.2(a)).	in Application No een received in this National Stage	
Attachment(s)	<b></b>		
Notice of References Cited (PTO-892)     Notice of Draftsperson's Patent Drawing Review     Information Disclosure Statement(s) (PTO-1449 Paper No(s)/Mail Date	(PTO-948) Paper	iew Summary (PTO-413) · No(s)/Mail Date e of Informal Patent Application (PTO-152) :	

Art Unit: 2684

#### **DETAILED ACTION**

### Response to Arguments

Applicant's arguments with respect to claim 40 has been considered but is moot in view of the new ground(s) of rejection.

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 40 - 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mitchell et al. (US Patent 5,966,671) in view of Seymour (US Patent No. 6,529,713) and in further view of Griffin et al. (US Patent No. 6,873,317) and further in view of Tso et al (US Patent No. 6,157,323).

Regarding claim 40, Mitchell teaches of a method for using a multi-function key with a protrusion adapted to slide in a first direction and a second direction substantially opposite to the first direction, and be pressed in a third direction substantially perpendicular to the first direction (as seen in Figure 3 and column 3, lines 8 - 25), a display for displaying at least one of digits and characters, as seen in Figure 2 and column 2, lines 55 - 65) and at least one hierarchal menu for

Art Unit: 2684

selecting various functions (column 2, lines 18 - 30), comprising the steps of generating at least one input signal by performing at least one of the following multi function key manipulations: a) pressing the protrusion of the multi-function key at least once; b) sliding the protrusion of the multi-function key in the first direction; and c) sliding the protrusion of the multi-function key in the second direction (as seen in Figure 3 and starting column 2, line 66 and ending column 3, line 25 and column 2, lines 1 - 12).

Mitchell does not specifically teach of in a watch-type portable phone or the watch-type portable phone having the multi-function key (though it should be noted that Mitchell's invention deals with reduction of size of the mobile through the use of a smart button as detailed in, for example, starting column 1, line 66 and ending column 2, line 12) or of wherein the at least one input signal is used to input the at least digits and characters (though it should be noted that Mitchell does provide for provisions for editing via criteria, as seen in table 2, lines 29 -33). In a related art dealing with the carrying of small mobile, Seymour teaches of a watch-type portable phone or the watch-type portable phone (column 1, lines 5 - 14 and Figures 1 - 6).

It would have been obvious to one skilled in the art at the time of invention to have included into Mitchell's multi-function smart button, Seymour's wearable wrist watch configuration, for the purposes of carrying the reduced size mobile and conveniently using the mobile in such a position, as taught by Seymour.

Mitchell in view of Seymour do not specifically teach of wherein the at least one input signal is used to input the at least digits and characters.

In a related art dealing with a method to input characters in a mobile using one input device, Griffin teaches of wherein the at least one input signal is used to input the at least digits

Art Unit: 2684

1

and characters (figure 2, element 1000 & column 5, lines 21-57, specifically, thumb wheel 1000 as described in column 5, lines 30-35, 45-57).

It would have been obvious to one skilled in the art at the time of invention to have included into Mitchell and Seymour's wearable mobile with multifunction system, Griffin's inputting methods, for the purposes of realizing an input device which can manage with less mounting space, as taught by Griffin.

However, Griffin fails to specifically disclose the multifunction thumb wheel as capable of entering at least one of digits and characters which are input by displaying sets of the at least one of digits and characters, moving a cursor over at least one of a character and a digit displayed in the sets of the at least one of digits and characters, and selecting the at least one of the character and the digit below the cursor, using the at least one signal of the multi-function key. However, in related art of multi-function keys and data entry, Tso teaches manipulation of a multi function key of a portable device using the key the enter data by at least one of digits and characters which are input by displaying sets of the at least one of digits and characters, moving a cursor over at least one of a character and a digit displayed in the sets of the at least one of digits and characters, and selecting the at least one of the character and the digit below the cursor (see Tso, figure 9 and col. 14, line 61- col. 15, line 29 & figure 16 and col. 20, lines 17-26).

It would have been obvious to one skilled in the art at the time of invention to have included into Mitchell and Seymour's wearable mobile with multifunction system as modified by, Griffin's and further utilize Tso's multi function key inputting methods, for the purposes of realizing an input device which can manage with less mounting space and numerous text strings entering abilities that are more user friendly, as taught by Tso.

Art Unit: 2684

Regarding claim 41, Mitchell in view of Seymour, Griffin and Tso fail to specifically disclose wherein a first inputting is performed if the manipulation is performed for a short duration and a second inputting is performed if the manipulation is performed for a long duration. However, official notice is taken that it is well known in the art to have a first inputting is performed if the manipulation is performed for a short duration and a second inputting is performed if the manipulation is performed for a long duration as part of a thumb/wheel (as evident by Kunihiro, US Patent No. 5,915,228, column 3, lines 41-63).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include a first inputting is performed if the manipulation is performed for a short duration and a second inputting is performed if the manipulation is performed for a long duration with Mitchell's invention in order to provide the user with a timed judging procedure mode for inputting letters and characters.

Regarding claim 42, Mitchell further teaches of wherein the at least one input signal is further used to navigate through the at least one hierarchal menu (column 2, lines 18 -30).

Regarding claim 43, Mitchell further teaches of wherein the at least one input signal is further used to select a function (column 2, lines 18 -30).

Art Unit: 2684

#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edan Orgad whose telephone number is 571-272-7884. The examiner can normally be reached on 8:00AM to 5:30PM with every other Friday off...

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay Maung can be reached on 571-272-7882. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

EDAN ORGAD
PATENT EXAMINER/TELECOMM.

Page 6

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